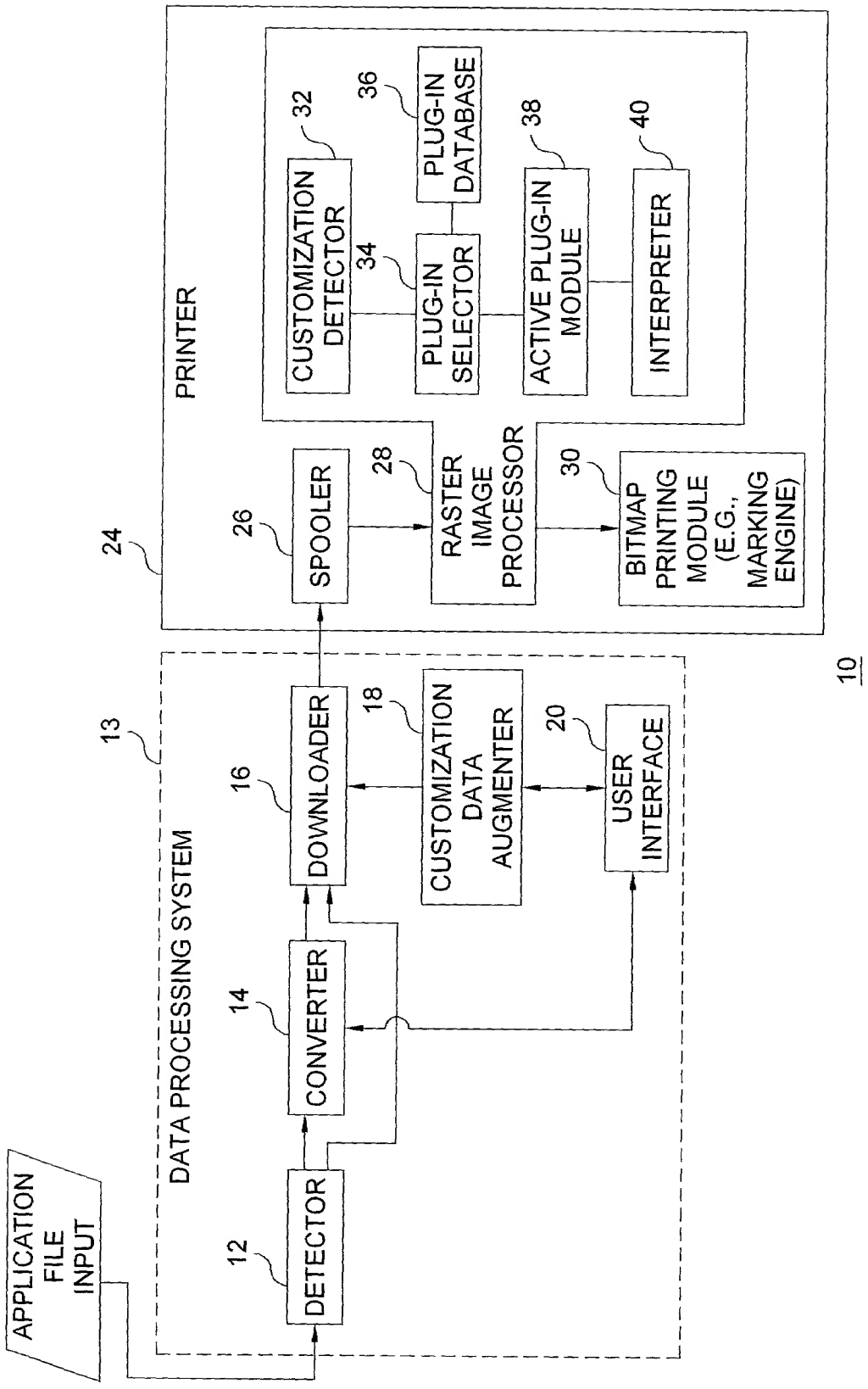
APPLICATION FILE INPUT
DATA PROCESSING SYSTEM
13
DETECTOR
12
CONVERTER
14
DOWNLOADER
16
CUSTOMIZATION DATA AUGMENTER
18
USER INTERFACE
20
PRINTER
24
SPOOLER
26
RASTER IMAGE PROCESSOR
28
BITMAP PRINTING MODULE (E.G., MARKING ENGINE)
30
CUSTOMIZATION DETECTOR
32
PLUG-IN SELECTOR
34
PLUG-IN DATABASE
36
ACTIVE PLUG-IN MODULE
38
INTERPRETER
40
10

FIG. 1

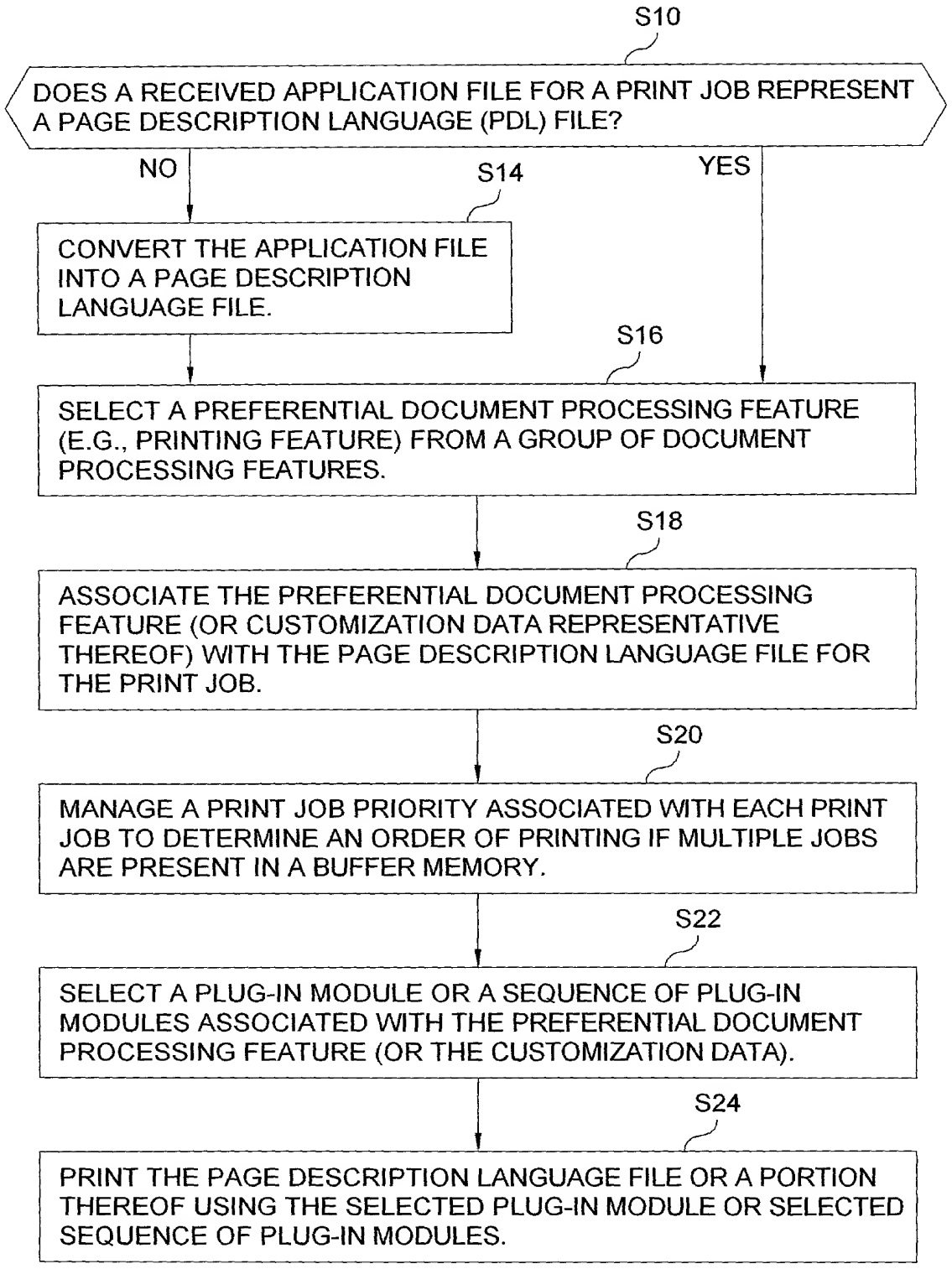

FIG. 2

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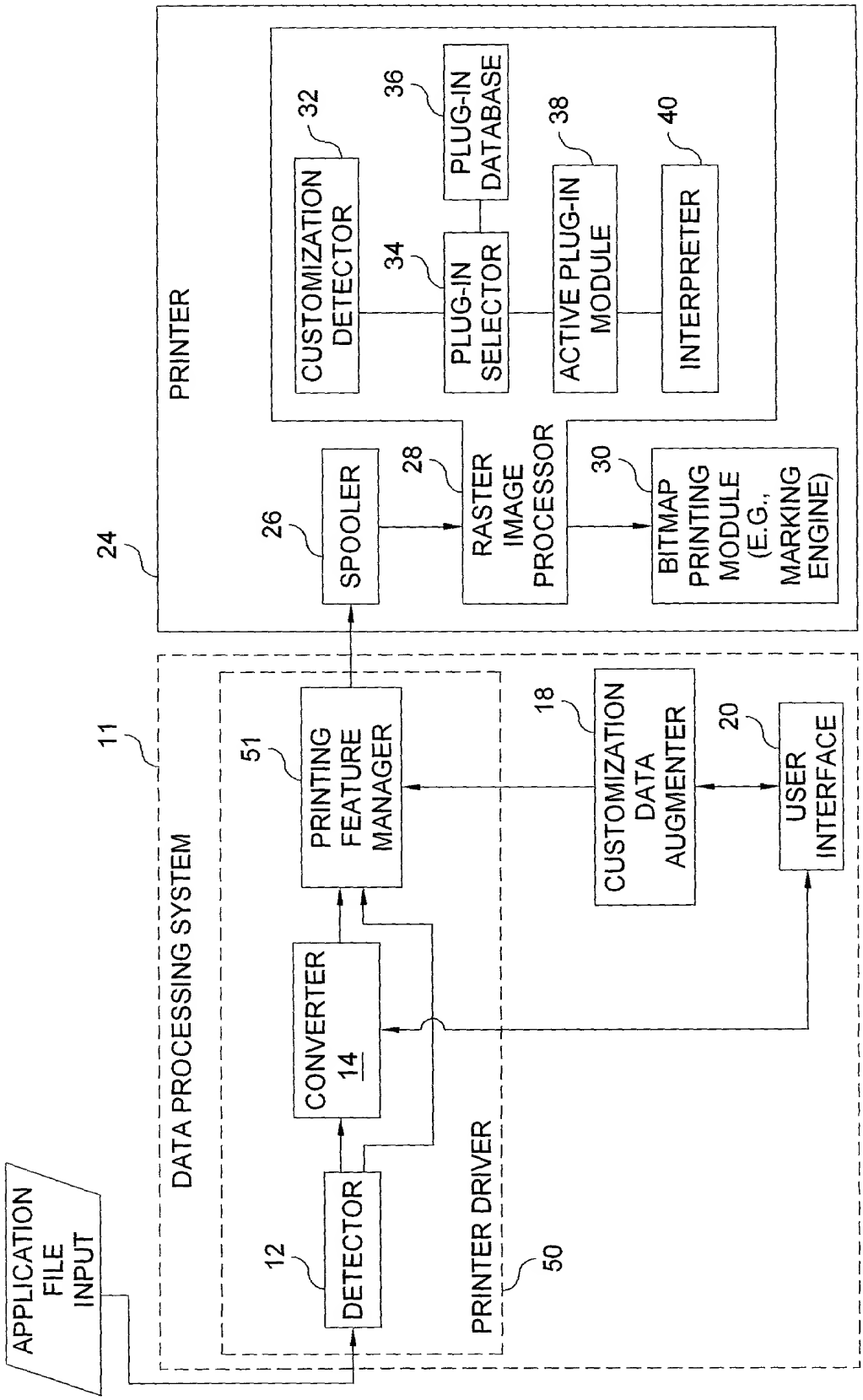
APPLICATION FILE INPUT
DATA PROCESSING SYSTEM
11
PRINTER DRIVER
50
DETECTOR
12
CONVERTER
14
PRINTING FEATURE MANAGER
51
CUSTOMIZATION DATA AUGMENTER
18
USER INTERFACE
20
PRINTER
24
SPOOLER
26
RASTER IMAGE PROCESSOR
28
BITMAP PRINTING MODULE (E.G., MARKING ENGINE)
30
CUSTOMIZATION DETECTOR
32
PLUG-IN SELECTOR
34
PLUG-IN DATABASE
36
ACTIVE PLUG-IN MODULE
38
INTERPRETER
40

FIG. 3

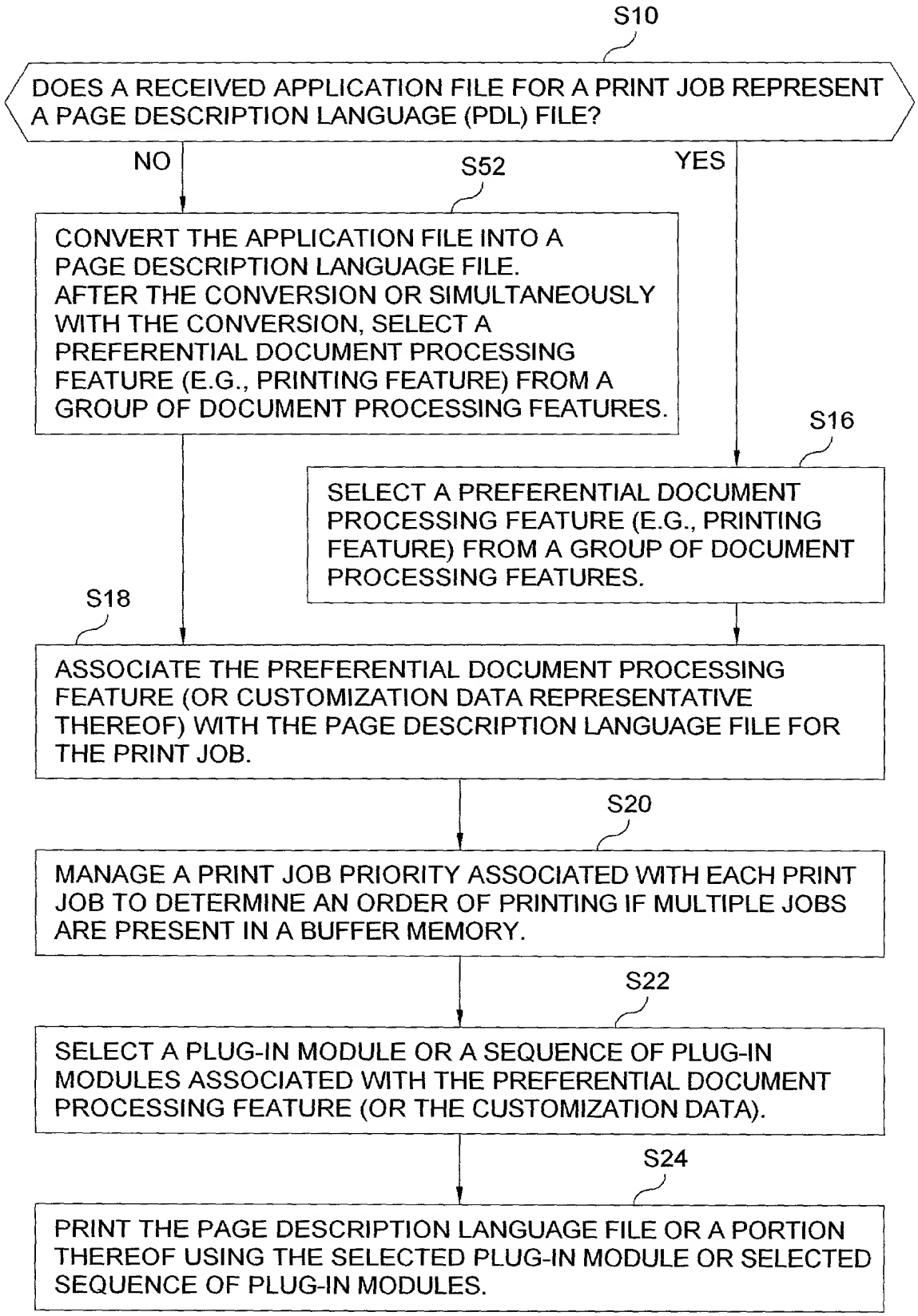
S10
DOES A RECEIVED APPLICATION FILE FOR A PRINT JOB REPRESENT A PAGE DESCRIPTION LANGUAGE (PDL) FILE?
NO
YES
S52
CONVERT THE APPLICATION FILE INTO A PAGE DESCRIPTION LANGUAGE FILE. AFTER THE CONVERSION OR SIMULTANEOUSLY WITH THE CONVERSION, SELECT A PREFERENTIAL DOCUMENT PROCESSING FEATURE (E.G., PRINTING FEATURE) FROM A GROUP OF DOCUMENT PROCESSING FEATURES.
S16
SELECT A PREFERENTIAL DOCUMENT PROCESSING FEATURE (E.G., PRINTING FEATURE) FROM A GROUP OF DOCUMENT PROCESSING FEATURES.
S18
ASSOCIATE THE PREFERENTIAL DOCUMENT PROCESSING FEATURE (OR CUSTOMIZATION DATA REPRESENTATIVE THEREOF) WITH THE PAGE DESCRIPTION LANGUAGE FILE FOR THE PRINT JOB.
S20
MANAGE A PRINT JOB PRIORITY ASSOCIATED WITH EACH PRINT JOB TO DETERMINE AN ORDER OF PRINTING IF MULTIPLE JOBS ARE PRESENT IN A BUFFER MEMORY.
S22
SELECT A PLUG-IN MODULE OR A SEQUENCE OF PLUG-IN MODULES ASSOCIATED WITH THE PREFERENTIAL DOCUMENT PROCESSING FEATURE (OR THE CUSTOMIZATION DATA).
S24
PRINT THE PAGE DESCRIPTION LANGUAGE FILE OR A PORTION THEREOF USING THE SELECTED PLUG-IN MODULE OR SELECTED SEQUENCE OF PLUG-IN MODULES.

FIG. 4

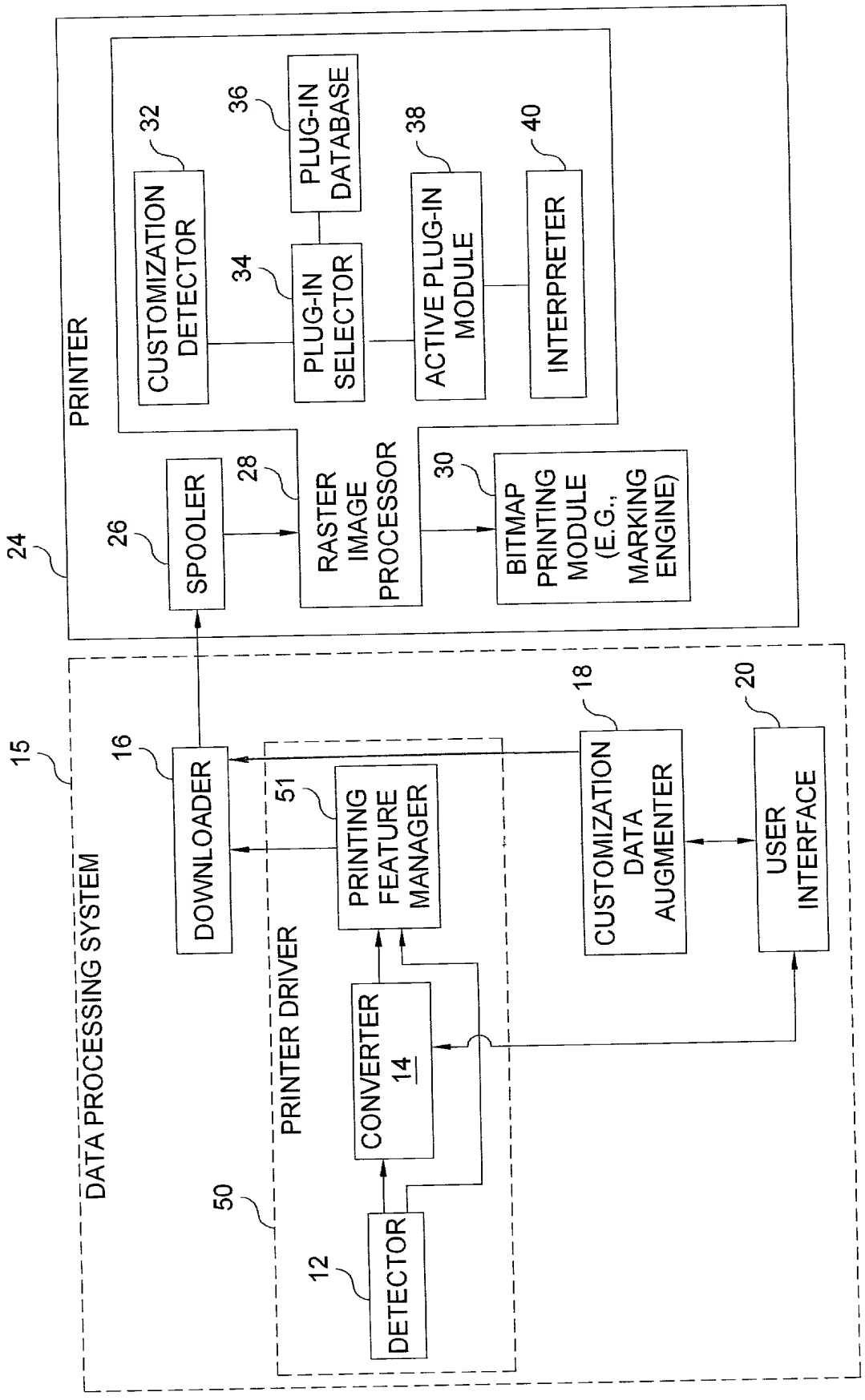
DATA PROCESSING SYSTEM
15
PRINTER DRIVER
50
DOWNLOADER
16
PRINTING FEATURE MANAGER
51
CONVERTER 14
DETECTOR
12
CUSTOMIZATION DATA AUGMENTER
18
USER INTERFACE
20
PRINTER
24
SPOOLER
26
RASTER IMAGE PROCESSOR
28
BITMAP PRINTING MODULE (E.G., MARKING ENGINE)
30
CUSTOMIZATION DETECTOR
32
PLUG-IN SELECTOR
34
PLUG-IN DATABASE
36
ACTIVE PLUG-IN MODULE
38
INTERPRETER
40

FIG. 5

CHECK CUSTOM FLOW CHART

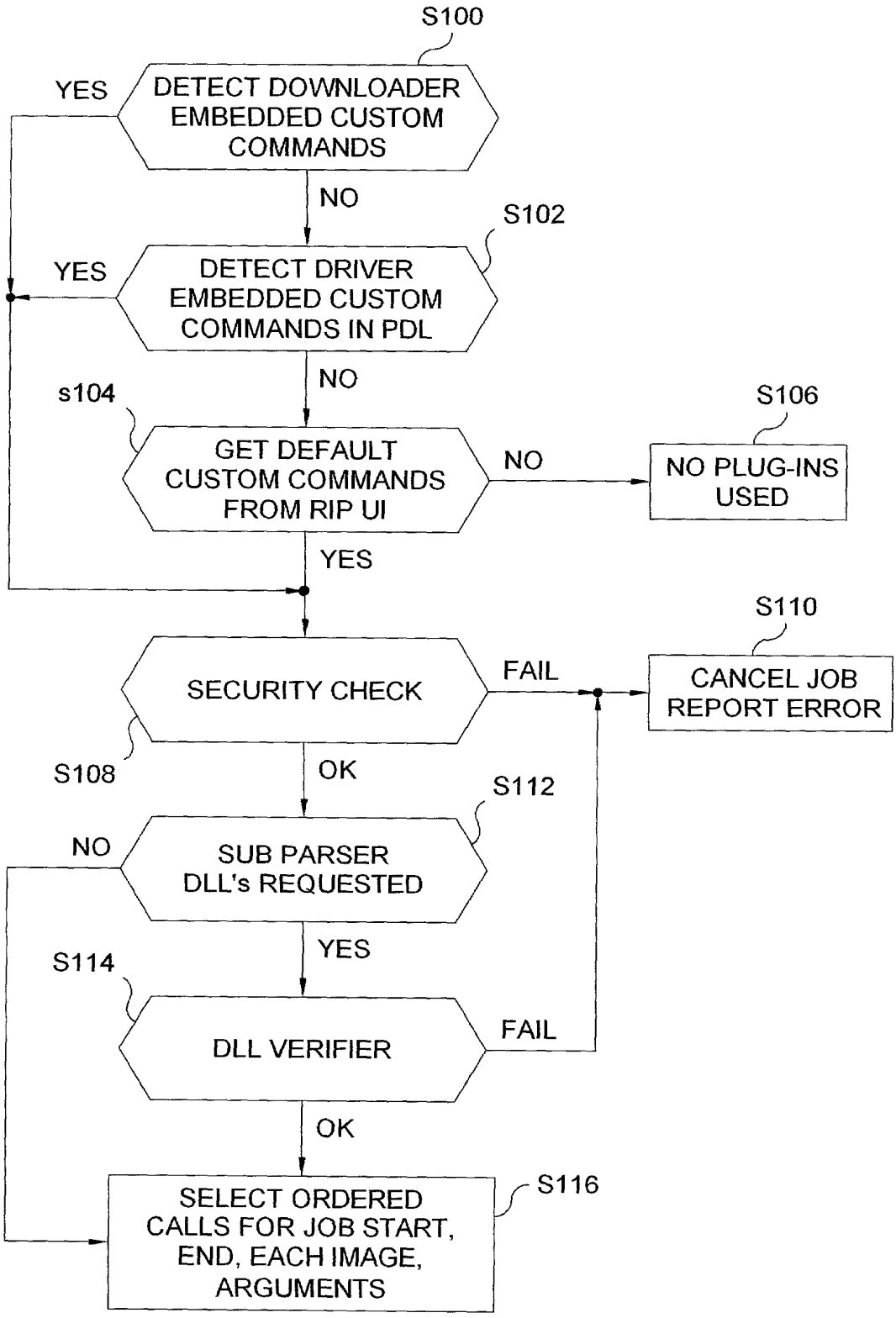

FIG. 6

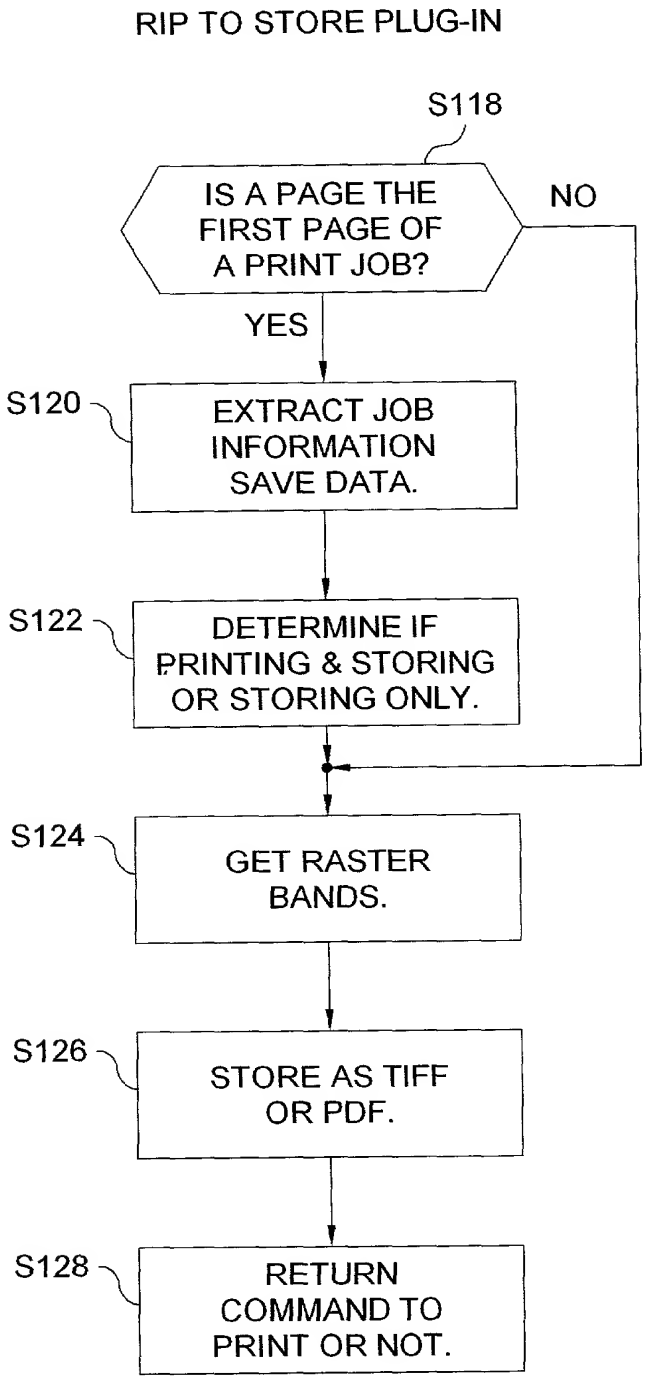
RIP TO STORE PLUG-IN
S118
IS A PAGE THE FIRST PAGE OF A PRINT JOB?
NO
YES
S120
EXTRACT JOB INFORMATION SAVE DATA.
S122
DETERMINE IF PRINTING & STORING OR STORING ONLY.
S124
GET RASTER BANDS.
S126
STORE AS TIFF OR PDF.
S128
RETURN COMMAND TO PRINT OR NOT.

FIG. 7

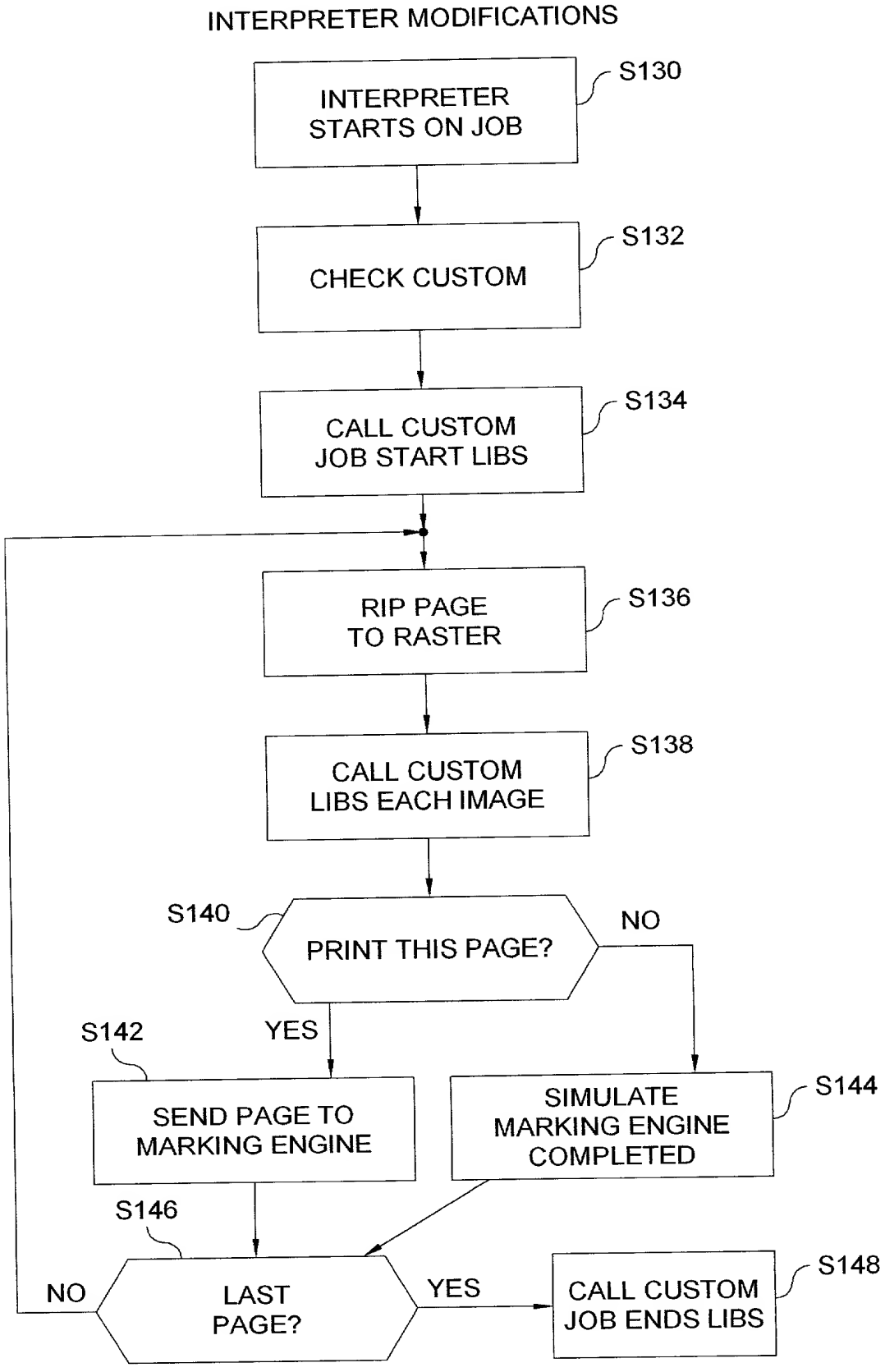
INTERPRETER MODIFICATIONS
INTERPRETER STARTS ON JOB
S130
CHECK CUSTOM
S132
CALL CUSTOM JOB START LIBS
S134
RIP PAGE TO RASTER
S136
CALL CUSTOM LIBS EACH IMAGE
S138
S140
PRINT THIS PAGE?
NO
YES
S142
SEND PAGE TO MARKING ENGINE
SIMULATE MARKING ENGINE COMPLETED
S144
S146
NO
LAST PAGE?
YES
CALL CUSTOM JOB ENDS LIBS
S148

FIG. 8